

## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

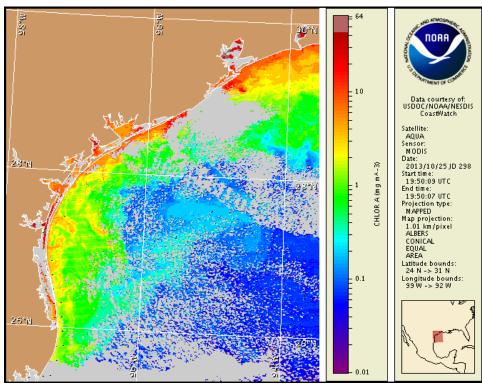
Monday, 28 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 21, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 18 to 24: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs\_bulletin\_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at: http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

## **Conditions Report**

There is currently no indication of *Karenia brevis* (commonly known as Texas red tide) along the coast of Texas. No respiratory irritation is expected Monday, October 28 through Monday, November 4. Check <a href="http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html">http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html</a> for recent, local observations.

There are currently patches of a bloom of the algae *Aureoumbra lagunensis* in the upper Laguna Madre region. This algae species does not produce the respiratory irritation associated with the Texas red tide caused by *Karenia brevis*, but it may cause discolored water and fish kills.

## **Analysis**

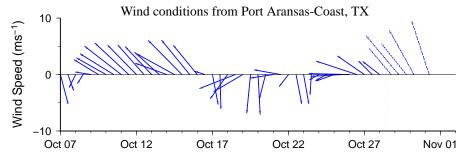
There is currently no indication of *Karenia brevis* along the coast of Texas (TPWD; 10/15). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (10/25, shown left) is partially obscured by clouds alongand offshore the Texas coast from the Bolivar Peninsula to Port Aransas limiting analysis in these regions. Elevated chlorophyll (2 to  $8\mu g/L$ ) is visible stretching along- and offshore the coast from Sabine Pass to the Rio Grande with patches of high chlorophyll (10 to >20 $\mu g/L$ ) along- and offshore from East Matagorda Bay to the Bolivar Peninsula. Elevated chlorophyll is most likely not indicative of the presence of *K. brevis* and is probably due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 30 km south from the Port Aransas region from October 25-31.

Davis, Kavanaugh

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

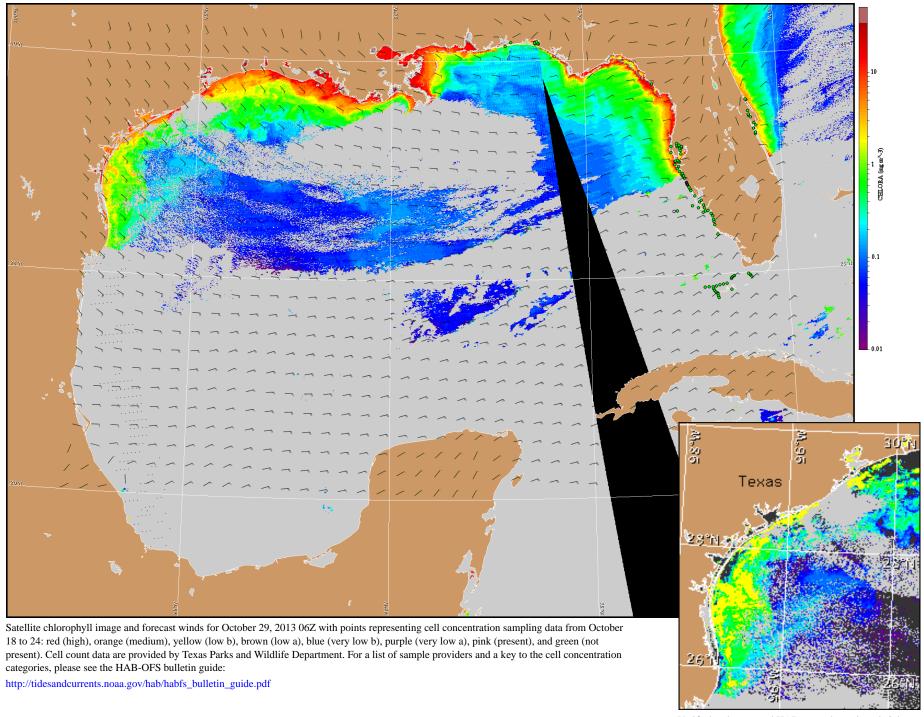


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

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## Wind Analysis

**Port Aransas**: Southeast winds (10-25kn, 5-13m/s) today through Wednesday. South winds (15-20kn, 8-10m/s) Thursday becoming southwest winds in the afternoon. North winds (5-10kn, 3-5m/s) Thursday night increasing to 10-15kn (5-8m/s) after midnight. Northeast winds (5-10kn) Friday.



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).